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		Terr	ns	Documents		
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	Database: Search:	US Pre-Grant Publication Full- US Patents Full-Text Database US OCR Full-Text Database EPO Abstracts Database JPO Abstracts Database Derwent World Patents Index IBM Technical Disclosure Bulled	etins	clear		Refine Search
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L2		adj dioxygenase	a piuni	0	L2	
<u>L1</u>	=	adj dioxygenase and transformation		0	L1	

END OF SEARCH HISTORY

\* \* \* \* \* \* \* \* \* STN Columbus

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=> s homogentisate(w)dioxygenase and antisense 2 HOMOGENTISATE (W) DIOXYGENASE AND ANTISENSE

=> d l1 1-2 ti

ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN L1

Plant genes encoding methyltransferase products involved in tocopherol TIbiosynthesis and their use in transforming plants for modified tocopherol composition

L1ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

TISense and \*\*\*antisense\*\*\* expression cassettes for dioxygenases and their use in increasing the tocopherol content of food plants

=> d 11 1-2 ibib ab

ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:154561 CAPLUS

DOCUMENT NUMBER:

138:200982

TITLE:

Plant genes encoding methyltransferase products involved in tocopherol biosynthesis and their use in

transforming plants for modified tocopherol

composition

CODEN: PIXXD2

INVENTOR(S):

Van Eenennaam, Alison; Valentin, Henry E.;

Karunanandaa, Balasulojini; Hao, Ming; Aasen, Eric;

Levering, Charlene

PATENT ASSIGNEE(S):

Monsanto Technology LLC, USA

SOURCE:

PCT Int. Appl., 218 pp.

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                      KIND
                              DATE
                                        APPLICATION NO.
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                                         ______
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                                         WO 2002-US26047
    WO 2003016482
                       A2
                              20030227
                                                              20020816
                       А3
    WO 2003016482
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PRIORITY APPLN. INFO.:
                                         US 2001-312758P
                                          WO 2002-US26047
                                                           W 20020816
AΒ
    The present invention relates to genes assocd. with the tocopherol
    and includes nucleic acid mols., proteins, and antibodies assocd. with
    2-methyl-6-phytylplastoquinol/2-methyl-6-solanylplastoquinol-9
    methyltransferase. .gamma.-Tocopherol methyltransferase genes are
    provided from Arabidopsis thaliana, Oryza sativa, Zea mays, Gossypium
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biosynthesis pathway. More particularly, the present invention provides genes that encode polypeptides that have methyltransferase activity in the synthesis of tocopherols, such as .qamma.-tocopherol methyltransferase and hirsutum, Cuphea pulcherrima, Brassica napus, Lycopersicon esculentum, Glycine max, Tagetes erecta, and Lilium asiaticum. Homologs previously identified as .DELTA.24-sterol C-methyltransferase (EC 2.1.1.41) are also identified in cyanobacteria (Anabaena, Synechocystis, Nostoc punctiforme) and Prochlorococcus marinus. The present invention also provides methods for utilizing such agents, for example in gene isolation, gene anal. and the prodn. of transgenic plants. Moreover, the present invention includes transgenic plants modified to express the aforementioned polypeptides. In addn., the present invention includes methods for the prodn. of products from the tocopherol biosynthesis pathway.

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ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
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ACCESSION NUMBER:

2001:114633 CAPLUS

DOCUMENT NUMBER:

134:160350

TITLE:

Sense and \*\*\*antisense\*\*\* expression cassettes for

dioxygenases and their use in increasing the

tocopherol content of food plants

INVENTOR(S):

Ebneth, Marcus; Herbers, Karin; Geiger, Michael;

Saalbach, Isolde

CODEN: GWXXBX

PATENT ASSIGNEE(S):

Sungene G.m.b.H. & Co. K.-G.a.A., Germany

Ger. Offen., 28 pp.

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT: 1

German

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----

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DE 19937957
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                               20010215
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                                                                  19990811
     CA 2381316
                         AA
                               20010222
                                           CA 2000-2381316
                                                                  20000810
                                           WO 2000-EP7807
                                                                  20000810
    WO 2001012827
                         A2
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     BR 2000013127
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                               20020423
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                                                                  20000810
                               20020502
                                          EP 2000-951492
     EP 1200598
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PRIORITY APPLN. INFO.:
                                           DE 1999-19937957
                                                               A 19990811
                                           WO 2000-EP7807
                                                               W 20000810
AΒ
     Expression cassettes using strong plant promoters are described for use in
     the expression of 4-hydroxyphenylpyruvate dioxygenase genes in plants.
     Strong expression of this gene, coupled with ***antisense***
     inhibition of expression of the endogenous
                                               ***homogentisate***
       ***dioxygenase***
                          gene can be used to enlarge intracellular pools of
    homogentisate and thereby increase levels of tocopherol biosynthesis. The
     4-hydroxyphenylpyruvate dioxygenase gene of Streptomyces avermitilis was
     codon optimized for expression in Brassica napus and a partial sequence
          ***homogentisate***
                                 ***dioxygenase***
                                                     was cloned from B. napus
     by PCR. These were cloned into expression cassettes using the 35S or
     legumin B promoters.
=> s homogentisate(w)dioxygenase and transform?
            1 HOMOGENTISATE(W) DIOXYGENASE AND TRANSFORM?
=> d 12 1 ibbi ab
'IBBI' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'
The following are valid formats:
ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
DALL ----- ALL, delimited (end of each field identified)
DMAX ----- MAX, delimited for post-processing
FAM ----- AN, PI and PRAI in table, plus Patent Family data
FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
SAM ----- CC, SX, TI, ST, IT
SCAN ------ CC, SX, TI, ST, IT (random display, no answer numbers;
             SCAN must be entered on the same line as the DISPLAY,
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e.g., D SCAN or DISPLAY SCAN)

STD ----- BIB, IPC, and NCL

IABS ------ ABS, indented with text labels IALL ------ ALL, indented with text labels IBIB ----- BIB, indented with text labels IMAX ----- MAX, indented with text labels ISTD ----- STD, indented with text labels

OBIB ----- AN, plus Bibliographic Data (original)

OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations

HIT ----- Fields containing hit terms

HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)

containing hit terms

HITRN ----- HIT RN and its text modification

HITSTR ----- HIT RN, its text modification, its CA index name, and

its structure diagram

HITSEQ ----- HIT RN, its text modification, its CA index name, its

structure diagram, plus NTE and SEQ fields

FHITSTR ---- First HIT RN, its text modification, its CA index name, and

its structure diagram

FHITSEQ ---- First HIT RN, its text modification, its CA index name, its

structure diagram, plus NTE and SEQ fields

KWIC ----- Hit term plus 20 words on either side

OCC ----- Number of occurrence of hit term and field in which it occurs

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All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):ibib

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:154561 CAPLUS

DOCUMENT NUMBER: 138:200982

TITLE: Plant genes encoding methyltransferase products

involved in tocopherol biosynthesis and their use in
 \*\*\*transforming\*\*\* plants for modified tocopherol

composition

INVENTOR(S): Van Eenennaam, Alison; Valentin, Henry E.;

Karunanandaa, Balasulojini; Hao, Ming; Aasen, Eric;

Levering, Charlene

PATENT ASSIGNEE(S): Monsanto Technology LLC, USA

SOURCE: PCT Int. Appl., 218 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PA								ì	APPLICATION NO. DAY								
	WO 2003016482 WO 2003016482						0227	WO 2002-US26047					20020816				
WO							2004 AU,		BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
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US	US 2003154513			A1		2003	0814	US 2002-219810					20020816				
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PRIORITY APPLN. INFO.:								US 2001-312758P					]	P 20010817			
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- => s homogentisate(w)dioxygenase and inhibition
- L3 4 HOMOGENTISATE(W) DIOXYGENASE AND INHIBITION
- => d l3 1-4 ti
- L3 ANSWER 1 OF 4 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
- TI Alkaptonuria, Ochronosis, and Ochronotic Arthropathy.
- L3 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Alkaptonuria a nearly forgotten paradigm of a metabolic disease
- L3 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Sense and antisense expression cassettes for dioxygenases and their use in increasing the tocopherol content of food plants
- L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Affinity chromatography of homogentisate-1,2-dioxygenase from Aspergillus niger
- => s hqd and antisense
- L4 3 HGD AND ANTISENSE
- => d 14 1-3 ti
- L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Human tissue-specific housekeeping genes identified by expression profiling
- L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Genes that are differentially expressed during erythropoiesis and their diagnostic and therapeutic uses

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

TI Generation of transgenic plants with enhanced tocopherol concentrations by cloning microbial gene tyrA

## => d 14 3 ibib ab

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:868650 CAPLUS

DOCUMENT NUMBER:

137:364394

TITLE:

Generation of transgenic plants with enhanced

tocopherol concentrations by cloning microbial gene

tvrA

INVENTOR(S):

Valentin, Henry E.; Mitsky, Timothy A.

PATENT ASSIGNEE(S):

Monsanto Technology LLC, USA

SOURCE:

PCT Int. Appl., 206 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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									1	WO 2002-US13898 W				W 2	20020503			

The present invention is in the field of plant genetics and biochem. More specifically, the invention relates to genes assocd. with the tocopherol biosynthesis pathway. The present invention provides and includes nucleic acid mols., proteins, and antibodies assocd. with the genes of the tocopherol biosynthesis pathway. The present invention also provides methods for utilizing such agents, for example in gene isolation, gene anal. and the prodn. of transgenic plants. Moreover, the present invention includes transgenic plants modified to express proteins assocd. with the tocopherol pathway. In addn., the present invention includes methods for the prodn. of products from the tocopherol biosynthesis pathway. Thus, Arabidopsis thaliana transformed with gene tyrA and other tocopherol biosynthesis genes produced significantly higher levels of tocotrienols and tocopherols when compared to the untransformed plant.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	37.73	37.94
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY -2.10	SESSION -2.10

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